

Testing the Collaborative Aviation Weather Statement during the Aviation Weather Testbed 2014 Summer Experiment

Steven A. Lack and Benjamin R.J. Schwedler

Aviation Weather Center

ABSTRACT

The Collaborative Aviation Weather Statement (CAWS) is a product designed to bridge the gap between meteorological information and air traffic flow management decision support at the national strategic level. Over the last several years the CAWS has been championed by the Collaborative Decision Making (CDM) group within the FAA; stakeholders in this group range from FAA operational decision makers to weather forecast producers to airline dispatchers.

The CAWS responds to the five focus areas of the Weather Ready Nation (WRN) paradigm by enhancing impact-based decision support services, enhancing communications and outreach, implementing new science and technology, improving information delivery, and leveraging external partnerships. The CAWS represents a shift in service concept from the Aviation Weather Center's current routinely issued convective products (i.e. the Collaborative Convective Forecast Product) to an event-driven decision support tool backed by constant collaboration between the various air traffic stakeholders.

The workflow supporting this concept was tested in full during the Aviation Weather Testbed (AWT) 2014 Summer Experiment prior to its scheduled operational demonstration beginning in the spring of 2015. The 2014 AWT experiment included testing the new, routinely-available automated convective guidance that would complement the event-driven CAWS, by providing the strategic weather picture for the semi-hourly scheduled planning telcons hosted by the FAA Air Traffic Control System Command Center (ATCSCC). AWC forecasters were heavily involved in the experiment, in part by testing and providing feedback on the NAWIPS-based CAWS production software. Most importantly, the experiment brought FAA stakeholders and NWS forecasters together in the AWT, and allowed for the actual testing of real-time collaboration between these diverse groups. The collaboration test was designed to simulate the lack of co-location between producer and the various collaborators.

Many lessons were learned in the AWT experiment, and in the end the timely production of this critical, impact-based decision support product was improved. The experiment revealed operational benefits of the CAWS product, and some potential challenges that would need to be addressed prior to implementation. This presentation will summarize the CAWS development process, its production methodology and related automated convective guidance, and results of the real-time experimental tests during the 2014 Summer Experiment.